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ABSTRACT OF THE DISCLOSURE

[0096]

[0097] One principal embodiment of the disclosure pertains to a method of optically fabricating a photomask using a direct write continuous wave laser, comprising a series of steps including: applying an organic antireflection coating over a surface of a photomask which includes a chrome-containing layer; applying a chemically-amplified DUV photoresist over the organic antireflection coating; post apply baking the DUV photoresist over a specific temperature range; exposing a surface of the DUV photoresist to the direct write continuous wave laser; and, post exposure baking the imaged DUV photoresist over a specific temperature range. The direct write continuous wave laser preferably operates at a wavelength of 244 nm or 257 nm. In an alternative embodiment, the organic antireflection coating may be applied over an inorganic antireflection coating which overlies the chrome containing layer.